

ABSTRACT

The present invention is directed to a practically universal surface modification process and the materials thereby obtained. In general, the process includes initial epoxy modification of a substrate surface by attachment of an epoxy-containing polymer to the surface. Following attachment of the polymer, still-existing epoxy groups on the polymer may then cross-link the polymer to form a unified anchoring layer on the surface. Other epoxy groups in the anchoring layer, not utilized in forming the layer may be used to graft surface modifying materials to the surface. For instance, macromolecules, biomolecules, polymers, and polymerization initiators may be grafted to the surface via the anchoring layer.